



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Dixie Resource Area Office
225 North Bluff Street
St. George, Utah 84770
(801)673-4654



3809
UTU-68572
(UT-045)

August 18, 1992

Holland Shepard
Division of Oil, Gas, and Mining
355 West North Temple
3 Triad Center, Ste. 350
Salt Lake City, UT 84180-1203

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AUG 21 1992

DIVISION OF
OIL GAS & MINING

Dear Mr. Shepherd:

After your discussion with Larry Gore on August 17, 1992, he met with our Range Conservationist and Wildlife Biologist to consider your comments concerning the seed mix for the Tenneco Goldstrike project area.

The seed mix we recommend after this meeting is:

Common Name	Species	lbs/ac (PLS)
<u>Shrubs</u>		
Desert bitterbrush	Purshia glandulosa	1
Serviceberry	Amelanchier utahensis	1
Mountain mahogany	Cercocarpus montanus	1
Oakbrush sumac	Rhus trilobata	1
Forage kochia	Kochia prostrata	1
<u>Forbs</u>		
Yellow sweetclover	Melilotus officinalis	1
Lewis flax	Linum lewisii (Appar)	1
Palmer penstemon	Penstemon palmeri (Cedar)	1
<u>Grasses</u>		
Indian ricegrass	Oryzopsis hymenoides (Paloma)	2
Pubescent wheatgrass	Agropyron trichophorum (Lanar)	4
Smooth brome	Bromus inermis (Lanar)	2
Russian wildrye	Elymus junceus	2
Galleta grass	Hilaria jamesii	2

Our experience with seeding Smooth brome in burned areas in Washington County and in northern Arizona indicates that it has good germination, even in areas lower and dryer than the Goldstrike site.

We are still concerned with seeding at 20 lbs/acre or 82 seeds/square foot for this mix. For burn and range seedings, we rarely exceed 50 seeds/square foot which usually comes to about 12 to 15 lbs/acre. The Interagency Forage and Conservation Planting Guide for Utah recommends seeding rates between 8 and 17 lbs/acre for erosion control on mine sites in Pinyon-Juniper ecosystems with 14 inches of rain and shallow, gravelly soils. Tenneco's proposal to fertilize the soil, drill seed, and then mulch and the revegetation success they have on the site already indicates they should get a good germination rate. Therefore, increasing seeding rates to compensate for poor germination may be counterproductive.

As Larry mentioned during the phone conversation, close co-ordination between our agencies is needed to establish acceptable reclamation seed mixes for all mining disturbances. In addition to rapid site stabilization, we try to consider such factors as forage production, and the acceptability of introduced species in some habitats. It appears the best method of establishing seed mixes will be to come up with standard seed mixes for the various areas, based on existing vegetation, soil, and precipitation. This will save us time, give us increased uniformity among the rehabilitation projects, and prevent confusing the operator with several different mixes for the site.

The work will be done as time allows, probably this winter. As the work progresses, we look forward to your input.

If you have any questions, please contact Larry Gore at this office.

Sincerely,



Dale Ross
Acting Area Manager

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